

L1 FILE 'HCAPLUS' ENTERED AT 16:52:51 ON 21 SEP 2009
1 S US 20070149787/PN

L2 FILE 'REGISTRY' ENTERED AT 16:53:23 ON 21 SEP 2009
1 S 88-15-3/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

L3 FILE 'REGISTRY' ENTERED AT 16:56:16 ON 21 SEP 2009
STRUCTURE UPLOADED

L3 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR



L4 47 S L3 SSS SAM
L5 12581 S L3 SSS FULL

FILE 'HCAPLUS' ENTERED AT 16:58:13 ON 21 SEP 2009
L6 3951 S L5
L7 1927 S L5/PREP
L8 17217 S (CATION? EXCHANGE? RESIN?)
L9 0 S L7 AND L8
L10 176294 S (ION? EXCHANGE?)
L11 2 S L7 AND L10
L12 19481 S CATION EXCHANGERS/IT
L13 1 S L12 AND L7

L13 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Process for preparation of 2-acylthiophene derivatives

AB This invention pertains to a method for producing 2-acylthiophene compds., characterized by reacting a thiophene compound with an acid anhydride or an acid halide in the presence of a solid acid catalyst at a temperature lower than 75 °C in the absence of any solvent. This invention provides a convenient method to prepare 2-acylthiophene derivs. with reduction of 3-acylthiophene byproduct.

ACCESSION NUMBER: 2005:564653 HCAPLUS Full-text

DOCUMENT NUMBER: 143:97257

TITLE: Process for preparation of 2-acylthiophene derivatives

INVENTOR(S): Bando, Seiji; Satake, Syuzo; Kagano, Hirokazu

PATENT ASSIGNEE(S): Sumitomo Seika Chemicals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
20041213	WO 2005058866	A1	20050630	WO 2004-JP18569	
CH,	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,				
GD,	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB,				
LC,	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,				
NI,	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,				
SY,	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,				
ZW	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,				
AM,	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,				
DK,	AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,				
PT,	EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL,				
ML,	RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,				
	MR, NE, SN, TD, TG				
20041213	CA 2544286	A1	20050630	CA 2004-2544286	
20041213	EP 1695972	A1	20060830	EP 2004-806930	
20041213	R: CH, DE, ES, FR, GB, IT, LI				
	CN 1886396	A	20061227	CN 2004-80035125	
20041213	CN 100455578	C	20090128		
	IN 2006DN02337	A	20070803	IN 2006-DN2337	
20060427	US 20070149787	A1	20070628	US 2006-579734	
20060518					
PRIORITY APPLN. INFO.:				JP 2003-419362	A
20031217				WO 2004-JP18569	W
20041213					

L14 1895 S ACYLATION CATALYSTS/IT
L15 15 S L7 AND L14
L16 11 S L15 AND (PY<2003 OR PRY<2003 OR AY<2003)

L16 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Process and catalysts for the synthesis of cyclopentyl 2-thienyl ketone
tiletamine and tiletamine acid addition salts such as tiletamine hydrochloride
AB Solid, nontin-containing catalysts can be used for the high-yield synthesis of cyclopentyl 2-thienyl ketone by the reaction of

cyclopentanecarboxylic acid chloride and thiophene. Aluminum trichloride is both cheaper than stannic chloride and it is easier to deal with as a waste stream. The use of graphite as a catalyst for the acylation of thiophene with cyclopentanecarboxylic acid chloride is demonstrated. Cyclopentyl 2-thienyl ketone is then brominated with bromine to produce 1-bromocyclopentyl 2-thienyl ketone which is then aminated with EtNH₂ to produce 1-hydroxycyclopentyl 2-thienyl N-Et ketimine which is then subjected to a thermal rearrangement by refluxing in o-dichlorobenzene to yield 2-(ethylamino)-2-(2-thienyl)cyclohexanone which can be salified with HCl in the same solvent without isolation to give the corresponding hydrochloride salt.

ACCESSION NUMBER: 1999:671043 HCAPLUS Full-text
 DOCUMENT NUMBER: 131:271804
 TITLE: Process and catalysts for the synthesis of cyclopentyl 2-thienyl ketone tiletamine and tiletamine acid addition salts such as tiletamine hydrochloride
 INVENTOR(S): Lapin, Yuri Aleksandrovich; Sanchez, Ignacio H.
 PATENT ASSIGNEE(S): Great Lakes Chemical Corporation, USA
 SOURCE: U.S., 7 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5969159	A	19991019	US 1999-250368	
19990216 <--				
WO 2000049012	A1	20000824	WO 1999-US18569	
19990816 <--				
W: CA, IL				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			US 1999-250368	A
19990216 <--				
OTHER SOURCE(S):	CASREACT 131:271804			
IC ICM C07D333-22				
INCL 549076000				
CC 27-8 (Heterocyclic Compounds (One Hetero Atom))				
Section cross-reference(s): 67				
IT Acylation catalysts				
(aluminum chloride or graphite for the acylation of thiophene with cyclopentanecarboxylic acid chloride in the preparation of cyclopentyl 2-thienyl ketone)				
IT 4524-93-0P, Cyclopentanecarboxylic acid chloride			14176-49-9P,	
Tiletamine				
17536-56-0P	94139-04-5P	39186-05-7P		
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)				
(process and catalysts for the synthesis of cyclopentyl 2-				

thienyl
ketone tiletamine and tiletamine acid addition salts such as
tiletamine
hydrochloride)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
RECORD
(1 CITINGS)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L16 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Environmentally friendly catalysts for acylation reactions
AB Solid acid catalysts were studied in the acylation of activated
organic substrates to study the possibility of replacing AlCl₃,
due to its environmental constraints. Unlike with toluene, in the
acylation of mesitylene using catalytic amts. of solid acid
catalysts yields comparable to that with AlCl₃ were observed using
benzoyl chloride, while with the other acylating agents
(propionoyl, 2-chloropropionoyl, acetyl chloride or acetic
anhydride) lower values were obtained as a function of the
strength and stability of the carbocation formed. However, in
comparison to AlCl₃, in all cases the solid acid catalysts
considerably reduced the formation of byproducts due to mesitylene
or other polymerization reactions. For the catalysts studied, the
following scale of reactivity was detected: acid treated clays >
pillared clays > clays > zeolites, as a function of the
accessibility and acidity of the active sites, surface area and
nature of the pillar constituent. The interesting behavior of
com. acid treated clays was confirmed by the acylation of
thiophene with p-fluorobenzoyl chloride, with almost complete
formation of the 2-isomer, useful intermediate for a
pharmaceutical active ingredient.

ACCESSION NUMBER: 1998;715068 HCAPLUS Full-text
DOCUMENT NUMBER: 129:330370
ORIGINAL REFERENCE NO.: 129:67383a,67386a
TITLE: Environmentally friendly catalysts for
acylation
reactions
AUTHOR(S): Campanati, M.; Fazzini, F.; Fornasari, G.;
Tagliani,
A.; Vaccari, A.; Piccolo, O.
CORPORATE SOURCE: Dip. Chimica Industr. e Materiali, Bologna,
40136,
Italy
SOURCE: Chemical Industries (Dekker) (1998),
75(Catalysis of Organic Reactions), 307-318
CODEN: CHEIDI; ISSN: 0737-8025
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
CC 22-4 (Physical Organic Chemistry)
Section cross-reference(s): 1, 21, 25, 27, 45, 63
IT Acylation
Acylation catalysts
Catalysis

Catalysts
 Environmental pollution control
 Friedel-Crafts reaction
 Friedel-Crafts reaction catalysts
 Organic synthesis
 Surface acidity
 Surface area
 (environmentally friendly catalysts for acylation reactions)
 IT 579-49-7P, 2-(p-Fluorobenzoyl)thiophene
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
 (Preparation)
 (environmentally friendly catalysts for acylation reactions)
 OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS
 RECORD
 (9 CITINGS)
 REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE
 FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L16 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Acylation of aromatics

AB The title process takes place in the presence of a catalyst
 comprised of a rare earth element on a support. Thus, PhOMe was
 refluxed with BzCl in the presence of a catalyst prepared by
 deposition of NdCl3.6H2O on montmorillonite to give a product
 comprising 94% p- and 6% o-methoxybenzophenone.

ACCESSION NUMBER: 1997:802443 HCAPLUS Full-text

DOCUMENT NUMBER: 128:22716

ORIGINAL REFERENCE NO.: 128:4455a

TITLE: Acylation of aromatics

INVENTOR(S): Baudry Barbier, Denise; Dormond, Alain;
 Montagne,

Fabienne; Desmurs, Jean Roger

PATENT ASSIGNEE(S): Rhone-Poulenc Chimie SA, Fr.

SOURCE: Fr. Demande, 32 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
---	---	---	---	---	---
	FR 2745287	A1	19970829	FR 1996-2481	
19960228 <--	FR 2745287	B1	19980410		
PRIORITY APPLN. INFO.:				FR 1996-2481	
19960228 <--					
OTHER SOURCE(S):			CASREACT 128:22716; MARPAT 128:22716		
IC	ICM C07C049-76				
	ICS C07C045-45; B01J023-10				
CC	25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)				
IT	Acylation catalysts				
	(acylation of aroms.)				
IT	75-36-5DP, Acetyl chloride, acylation products with 2-				

methoxynaphthalene
 93-04-9DP, 2-Methoxynaphthalene, benzoilation products 111-64-
 8DP, Octanoyl chloride, acylation products with 2-methoxynaphthalene
 135-90-2P, 2-Benzoylthiophene 611-94-9P, p-Methoxybenzophenone
 642-29-5P, 1-Benzoylnaphthalene 644-13-3P, 2-Benzoylnaphthalene
 2553-04-0P, o-Methoxybenzophenone 2719-27-9DP, Cyclohexylcarbonyl
 chloride, acylation products with 2-methoxynaphthalene 2936-65-
 4P, Methanone, cyclohexyl(1-naphthalenyl) 3282-30-2DP, Pivaloyl
 chloride, acylation products with 2-methoxynaphthalene 6453-99-2P,
 3-Benzoylthiophene 7469-80-9P, Methanone, cyclohexyl(4-
 methoxyphenyl)
 10404-26-9P, Methanone, cyclohexyl(2-naphthalenyl) 111504-19-9P,
 Methanone, cyclohexyl(2-methoxyphenyl)
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
 (Preparation)

(acylation of aroms.)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD
 (1 CITINGS)
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE
 FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L16 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 TI 5-(5-Methyl-2-thenoyl)salicylic acid
 AB The title acid (I) was prepared from Me salicylate and a 2-thenoyl
 chloride derivative Thus, Me salicylate was acylated by 5-methyl-
 2-thenoyl chloride and AlCl3 catalyst in Cl2CHCHCl2, and
 subsequent saponification gave I.
 ACCESSION NUMBER: 1986:129643 HCAPLUS Full-text
 DOCUMENT NUMBER: 104:129643
 ORIGINAL REFERENCE NO.: 104:20505a,20508a
 TITLE: 5-(5-Methyl-2-thenoyl)salicylic acid
 INVENTOR(S): Foguet Ambros, Rafael; Forne Felip, Ernesto;
 Sacristan
 Munoz, Aurelio; Ortiz Hernandez, Jose A.
 PATENT ASSIGNEE(S): Ferrer Internacional S. A., Spain
 SOURCE: Span., 7 pp. Adnn. to Span. 504,511.
 CODEN: SPXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Spanish
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
ES 525374	A2	19850201	ES 1983-525374	
19830722 <--				
ES 504511	A1	19830101	ES 1981-504511	
19810803 <--				
PRIORITY APPLN. INFO.:			ES 1981-504511	
19810803 <--				

IC ICM C07D333-20
ICS A61K031-38
CC 25-17 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 27
IT Acylation catalysts
(aluminum chloride, for salicylate ester with thenoyl chloride derivative)
IT 98204-42-3P 100462-88-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L16 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI The Nafion-H-catalyzed acylation of thiophene with acid anhydrides
AB The reaction of thiophene with acyclic acid anhydrides in the presence of Nafion-H (fluorocarbon resin sulfonic acid) afforded the corresponding 2-acylthiophenes in moderate yields. Acylation with cyclic acid anhydrides gave only low yields. The Nafion-H catalyst could be reused for the acylation with a little loss of activity.

ACCESSION NUMBER: 1982:217622 HCAPLUS Full-text
DOCUMENT NUMBER: 96:217622
ORIGINAL REFERENCE NO.: 96:35953a,35956a
TITLE: The Nafion-H-catalyzed acylation of thiophene with acid anhydrides
AUTHOR(S): Konishi, Hisatoshi; Suetsugu, Kazuhiro; Okano, Tamon;

Kiji, Jitsuo
CORPORATE SOURCE: Fac. Eng., Tottori Univ., Koyama, 680, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1982), 55(3), 957-8
CODEN: BCSJA8; ISSN: 0009-2673

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 96:217622

CC 27-8 (Heterocyclic Compounds (One Hetero Atom))
IT Acylation catalysts

(Nafion-H, of thiophene with acid anhydride)
IT 88-15-3P 135-00-2P 5333-83-5P 13679-75-9P 22971-62-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD
(7 CITINGS)

L16 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Acylation of benzothiophene in the presence of small amounts of iron(III) chloride
AB Acylation of benzo[b]thiophene with p-RC6H4COCl (R = Me, MeO, H) in the presence of FeCl3 gave 72-5% benzoylated products; with Ac2O 70% acetylated product was obtained. In all cases the products consisted of a mixture of 2- and 3-acylated products; the main product was the 3-acylbenzothiophene containing ≤20-5% 2-acyl product. The acetylbenzothiophenes were oxidized to give the resp. carboxylic acids.

ACCESSION NUMBER: 1978:615149 HCAPLUS Full-text

DOCUMENT NUMBER: 89:215149
ORIGINAL REFERENCE NO.: 89:33421a,33424a
TITLE: Acylation of benzothiophene in the presence of small amounts of iron(III) chloride
AUTHOR(S): Yuldashev, Kh. Yu.
CORPORATE SOURCE: Tashk. Gos. Univ., Tashkent, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1978), (8), 1039-40
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 89:215149
CC 27-9 (Heterocyclic Compounds (One Hetero Atom))
IT Acylation catalysts
(ferric chloride, for benzothiophene)
IT 7705-08-0, uses and miscellaneous
RL: CAT (Catalyst use); USES (Uses)
(acylation catalysts, for benzothiophene)
IT 5381-25-9P 6314-28-9P 6454-02-0P 6454-03-1P 68311-49-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L16 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Application of 2-trifluoromethanesulfonyloxypyridine in trifluoroacetic acid to acylation of aromatics
AB 2-(Trifluoromethanesulfonyloxy)pyridine (I) in CF3CO2H was very useful in the condensation of carboxylic acids with fluorene to give 2-acylfluorenes. The reaction of arenes with benzoic acid in the presence of I in CF3CO2H gave benzoylarenes.
ACCESSION NUMBER: 1978:6598 HCAPLUS Full-text
DOCUMENT NUMBER: 88:6598
ORIGINAL REFERENCE NO.: 88:1113a,1116a
TITLE: Application of 2-trifluoromethanesulfonyloxypyridine in trifluoroacetic acid to acylation of aromatics
AUTHOR(S): Keumi, Takashi; Saga, Hiroshi; Taniguchi, Rikio;
Kitajima, Hidehiko
CORPORATE SOURCE: Fac. Eng., Fukui Univ., Fukui, Japan
SOURCE: Chemistry Letters (1977), (9), 1099-102
CODEN: CMLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 88:6598
CC 26-4 (Condensed Aromatic Compounds)
Section cross-reference(s): 25, 27
IT Acylation catalysts
(2-(trifluoromethanesulfonyloxy)pyridine, for fluorene and benzenes by carboxylic acids)
IT 135-90-2P 611-94-9P 781-73-7P 954-16-5P 4038-13-5P

4044-60-4P 4885-14-7P 6407-29-0P 6407-30-3P 15860-31-8P
 20852-57-7P 33207-59-9P 65007-01-4P 65007-02-5P
 RL: SPN (Synthetic preparation); PPEP (Preparation)
 (preparation of)

L17 0 S L16 AND (CATION? EXCHANGE?)
 E BANDO SEIJI?/AU
 SET EXPAND CONTINUOUS
 L18 61 S E1-E2
 L19 1 S L18 AND L7

L19 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2009 ACS on STN
 TI Process for preparation of 2-acylthiophene derivatives
 ACCESSION NUMBER: 2005:564653 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:97257
 TITLE: Process for preparation of 2-acylthiophene
 derivatives
 INVENTOR(S): Bando, Seiji; Satake, Syuzo; Kagano,
 Hirokazu
 PATENT ASSIGNEE(S): Sumitomo Seika Chemicals Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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---	WO 2005058866	A1	20050630	WO 2004-JP18569	
20041213					
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,				
CH,	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB,				
GD,	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,				
LC,	LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,				
NI,	NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,				
SY,	TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,				
ZW					
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,				
AM,	AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,				
DK,	EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL,				
PT,	RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,				
ML,					
	MR, NE, SN, TD, TG				
CA 2544286	A1	20050630	CA 2004-2544286		
20041213					
EP 1695972	A1	20060830	EP 2004-806930		

20041213
 R: CH, DE, ES, FR, GB, IT, LI
 CN 1886396 A 20061227 CN 2004-80035125
 20041213
 CN 100455578 C 20090128
 IN 2006DN02337 A 20070803 IN 2006-DN2337
 20060427
 US 20070149787 A1 20070628 US 2006-579734
 20060518
 PRIORITY APPLN. INFO.: JP 2003-419362 A
 20031217 WO 2004-JP18569 W
 20041213

L20 1 S L18 AND (L12 OR L14)
 L21 0 S L20 NOT L19
 E SATAKE SYUZO?/AU
 L22 9 S E13-E14
 L23 1 S L22 AND (L7 OR L12 OR L14)
 L24 0 S L23 NOT L19
 E KAGANO HIROKAZU?/AU
 L25 45 S E26
 L26 1 S L25 AND (L7 OR L12 OR L14)
 L27 0 S L26 NOT L19

L1 STRUCTURE UPLOADED

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



L2 50 S L1 SSS SAM
 L3 52482 S L1 SSS FULL
 L4 STRUCTURE UPLOADED
 L5 50 S L4 SSS SAM
 L6 STRUCTURE UPLOADED

L6 STRUCTURE UPLOADED

=> d 16

L6 HAS NO ANSWERS

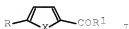
L6 STR



L7 34589 S L6 SSS FULL
 L8 50 S SSS SAM L7 SUB=L3
 L9 34589 S SSS FULL L7 SUB=L3

 FILE 'CAPLUS' ENTERED AT 17:40:40 ON 21 SEP 2009
 L10 11577 S L9
 L11 5734 S L9/PREP
 L12 19481 S CATION EXCHANGERS/IT
 L13 1895 S ACYLATION CATALYSTS/IT
 L14 26 S L11 AND (L12 OR L13)
 L15 19 S L14 AND (PY<2003 OR AY<2003 OR PRY<2003)

 L15 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
 TI Furans and long-chain ketones
 GI



AB Ketones I (X = NH, O, S, alkylimino; R = H, alkyl, alkenyl; R1 = alkyl, aryl, furyl, thienyl) were prepared by acylating the heterocycles with R1CO2H in the presence of (CF3CO)2O and a phosphoric acid catalyst. Thus furan was treated with EtCO2H in the presence of 2 mol (CF3CO)2O and Duolite ES 467 catalyst to give 96% 2-propionylfuran.

ACCESSION NUMBER: 1984:6313 CAPLUS Full-text
 DOCUMENT NUMBER: 100:6313
 ORIGINAL REFERENCE NO.: 100:1083a,1086a
 TITLE: Furans and long-chain ketones
 INVENTOR(S): Gaset, Antoine; Delmas, Michel
 PATENT ASSIGNEE(S): Agrifurane S. A., Fr.
 SOURCE: Fr. Demande, 13 pp.
 CODEN: FRXXBL
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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FR 2518999	A1	19830701	FR 1981-24468	
19811228 <--				
PRIORITY APPLN. INFO.:			FR 1981-24468	
19811228 <--				

OTHER SOURCE(S): MARPAT 100:6313
 IC C07D405-06; C07D207-333; C07D207-34; C07D307-46; C07D307-68;
 C07D333-22;
 C07D333-38; C07D409-06
 CC 27-6 (Heterocyclic Compounds (One Hetero Atom))
 IT Acylation catalysts
 (phosphates)
 IT 3194-15-8P 4682-94-4P 6790-19-8P 14360-50-0P 31235-77-5P
 78025-45-3P 86607-62-7P 86607-64-9P 88020-31-9P
 RL: SPN (Synthetic preparation); PREF (Preparation)
 (preparation of, phosphate catalyst for)
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS
 RECORD
 (2 CITINGS)
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE
 FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L15 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
 TI Aromatic transacylation with acylpolymethylbenzene-trifluoroacetic
 acid
 system
 AB The acyl group in acylpolymethylbenzenes is transferred to arenes
 by the action of acids such as CF3CO2H (I), CF3SO3H, and AlCl3. I
 which does not induce the transfer of the Me group is most
 excellent among the acids. The reaction of various
 acylpolymethylbenzenes with anisole in I has been examined A
 typical reaction was carried out by heating a mixture of
 acetylpentamethylbenzene, anisole, and I in a molar ratio of
 1:1:50, resp., under reflux to give p-acetylanisole and
 pentamethylbenzene. The reaction is considered to proceed through
 two steps; the reaction of an acylpolymethylbenzene with I gives a
 carboxylic trifluoroacetic anhydride and a polymethylbenzene, and
 then the reactive mixed acid anhydride reacts with an arene to
 give an acylarene and I.

ACCESSION NUMBER: 1983:106909 CAPLUS Full-text
 DOCUMENT NUMBER: 98:106909
 ORIGINAL REFERENCE NO.: 98:16289a,16292a
 TITLE: Aromatic transacylation with
 acylpolymethylbenzene-trifluoroacetic acid
 system
 AUTHOR(S): Keumi, Takashi; Morita, Toshio; Korome, Koichi;
 Ikeda,
 Masako; Kitajima, Hidehiko
 CORPORATE SOURCE: Fac. Eng., Fukui Univ., Fukui, 910, Japan
 SOURCE: Nippon Kagaku Kaishi (1992), (11), 1785-90
 CODEN: NKAKB8; ISSN: 0369-4577
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 OTHER SOURCE(S): CASREACT 98:106909
 CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 IT Acylation catalysts
 (trifluoroacetic acid, for acylpolymethylbenzene with arene)
 IT 86-15-3P 100-06-1P 121-97-1P 611-94-9P 700-12-9P
 781-73-7P 829-20-9P 941-98-0P 2040-20-2P 2040-26-8P 4160-
 51-4P

23886-71-7P 52629-41-1P
RL: SPN (Synthetic preparation); PPEP (Preparation)
(preparation of)

L15 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
TI Ketones

AB RCOR1 [R = (un)substituted Ph; R1 = Me, PhCH2] were prepared by reaction of RS (X = iodo, Br) with R14Sn and CO in the presence of Ni catalyst. Thus, 5.63 + 10-2 mmol Ni(CO)2(PPh3)2, 3.75 mmol PhI, and 1.88 mmol Me4Sn in P(NMe)3 were stirred under 20 atm CO pressure in an autoclave overnight at 120° to give 78% (based on Me4Sn) PhCOMe. Ni(CO)4, Ni(CO)3(PPh3), or NiCl2(PPh3)2 was also used as a catalyst.

ACCESSION NUMBER: 1982:491945 CAPLUS Full-text
DOCUMENT NUMBER: 97:91945
ORIGINAL REFERENCE NO.: 97:15323a,15326a
TITLE: Ketones
PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 57059818	A	19820410	JP 1980-136447	
19800929 <---				
JP 61016375	B	19860430		
PRIORITY APPLN. INFO.:			JP 1980-136447	
19800929 <---				
IC C07B029-00; C07C045-00; C07C069-76; C07C121-76				
ICA C07D333-10				
CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)				
IT Acylation catalysts (nickel compds., for halobenzenes with carbon monoxide, and tetramethyltin)				
IT 88-15-3P 100-06-1P 103-79-7P 122-00-9P 451-40-1P				
1443-80-7P 3609-53-8P				
RL: SPN (Synthetic preparation); PPEP (Preparation) (preparation of)				

L15 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
TI Phenylpentanone and other ketones

AB Reaction of RX (R = alkyl, aryl, etc.; X = halo) with R1mMR2n (R1 = alkyl, aryl, etc.; R2 = neg. groups, H, alkyl, aryl, etc.; M = metals, m, n = pos. integers) in the presence of CO and Pd catalysts gave ketones RCOR1. Thus, a mixture of 10.5 mg PhPdI(PPh3)2, 0.84 mL PhI, 1.23 mL Bu4Sn, and 30 atm CO in (Me2N)3PO was autoclaved overnight at 120° to give 441 mg PhCOBu.

ACCESSION NUMBER: 1981:406827 CAPLUS Full-text
DOCUMENT NUMBER: 95:6827
ORIGINAL REFERENCE NO.: 95:1287a,1290a
TITLE: Phenylpentanone and other ketones

PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology,
Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56002925	A	19810113	JP 1979-64690	
19790525 <--				
JP 60045606	B	19851011		
PRIORITY APPLN. INFO.: 19790525 <--			JP 1979-64690	A
IC C07C045-49; C07C049-213; C07C049-76; C07C069-738				
CC 25-16 (Noncondensed Aromatic Compounds)				
IT Acylation catalysts (palladium complexes, for alkyl and aryl halides by carbon monoxide and tetraalkylstannanes)				
IT 88-15-3P 93-55-0P 94-02-0P 100-06-1P 100-19-6P 103-79-7P 119-61-9P, preparation 141-79-7P 609-14-3P 769-59-5P				
1009-14-9P 1009-61-6P 1443-80-7P 1817-57-8P 1896-62-4P 5332-96-7P 10537-63-0P 24612-10-0P 38430-55-6P 42762-51-6P 65085-83-8P 77948-36-8P 77948-37-9P				
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)				

L15 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
TI Synthesis of chelate-forming ion exchangers based on polystyrene
AB To prepare cation exchangers (exchange capacity 0.4-1.5 mmol/g), polystyrene is nitrated, reduced, diazotized, and coupled with 15 chelating compds. containing OH and NH2 groups, e.g., chromotropic acid, alizarin, morin, dithizone, and ethylenediamine-N,N'-bis(o-hydroxyphenylacetic acid).
ACCESSION NUMBER: 1981:66489 CAPLUS Full-text
DOCUMENT NUMBER: 94:66489
ORIGINAL REFERENCE NO.: 94:10857a,10860a
TITLE: Synthesis of chelate-forming ion exchangers based on polystyrene
AUTHOR(S): Griesbach, M.; Lieser, K. H.
CORPORATE SOURCE: Fachber. Anorg. Chem. Kernchem., Tech. Hochsch. Darmstadt, Darmstadt, D-6100, Fed. Rep. Ger.
SOURCE: Angewandte Makromolekulare Chemie (1980), 90, 143-53
CODEN: ANMCBO; ISSN: 0003-3146
DOCUMENT TYPE: Journal
LANGUAGE: German
CC 36-4 (Plastics Manufacture and Processing)
IT Cation exchangers
(polystyrene derivs. containing chelating groups, preparation of)

IT 60-10-6DP, coupling products with diazotized reduced nitrated polystyrene
 72-48-0DP, coupling products with diazotized reduced nitrated polystyrene
 81-61-8DP, coupling products with diazotized reduced nitrated polystyrene
 87-66-1DP, coupling products with diazotized reduced nitrated polystyrene
 94-93-9DP, coupling products with diazotized reduced nitrated polystyrene
 140-22-7DP, coupling products with diazotized reduced nitrated polystyrene
 148-24-3DP, coupling products with diazotized reduced nitrated polystyrene
 148-25-4DP, coupling products with diazotized reduced nitrated polystyrene
 149-46-2DP, coupling products with diazotized reduced nitrated polystyrene
 325-91-0DP, coupling products with diazotized reduced nitrated polystyrene 480-16-0DP, coupling products with diazotized reduced nitrated polystyrene 536-17-4DP, coupling products with diazotized reduced nitrated polystyrene 1149-16-2DP, coupling products with diazotized reduced nitrated polystyrene 1170-02-1DP, coupling products with diazotized reduced nitrated polystyrene 3012-52-0DP, coupling products with diazotized reduced nitrated polystyrene 9003-53-6DP, amino derivs., diazotized, coupling products with chelating compds.
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as cation exchangers)
 OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

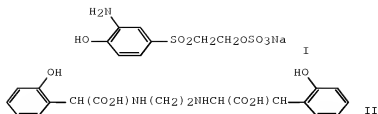
(5 CITINGS)

L15 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
 TI Polyamine-based ion-exchange resins
 AB A divinylbenzene-styrene copolymer (I) is nitrated, reduced, diazotized, and coupled with Tiron, N,N'-disalicylidene-1,2-ethanediamine, chromotropic acid, alizarin, pyrogallol, 4-methoxy-2-(thiazol-2-ylazo)phenol, 1,1,1-trifluoro-3-(2-thenoyl)acetone, dithizone, or one of five similar compds. to prepare ion exchangers which have rapid exchange rates, high selectivity, and good stability and are useful for separating metal ions or anions from aqueous or organic solns. A reducing agent is used to prevent the formation of phenolic OH groups during the coupling reaction. Thus, I (0.1-0.2 mm particles) is nitrated (to give 10.57% N content), reduced, diazotized and coupled with Tiron to prepare a cation exchange resin with exchange capacity 1.0 mmol/g.
 ACCESSION NUMBER: 1980:640518 CAPLUS Full-text
 DOCUMENT NUMBER: 93:240518
 ORIGINAL REFERENCE NO.: 93:38553a,38556a
 TITLE: Polyamine-based ion-exchange resins
 INVENTOR(S): Lieser, Karl Heinrich; Griesbach, Manfred; Burba,
 Peter

PATENT ASSIGNEE(S): Riedel-de Haen A.-G., Fed. Rep. Ger.
 SOURCE: Eur. Pat. Appl., 22 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 14222	A1	19800820	EP 1979-100358	
19790208 <--				
R: BE, FR, GB, IT, NL, SE				
PRIORITY APPLN. INFO.:			EP 1979-100358	
19790208 <--				
IC C08F008-30; C08F008-00; B01J045-00				
CC 36-3 (Plastics Manufacture and Processing)				
IT Anion exchangers				
Cation exchangers				
(azo group-containing derivs. of crosslinked polystyrene, manufacture of)				
IT 60-10-6DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 72-48-0DP, reaction products				
with diazotized aminated divinylnbenzene-styrene copolymer 81-61-8DP, reaction				
products with diazotized aminated divinylnbenzene-styrene copolymer 87-66-1DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 94-93-9DP, reaction products				
with diazotized aminated divinylnbenzene-styrene copolymer 140-22-7DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 148-25-4DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 149-45-1DP, reaction products				
with diazotized aminated divinylnbenzene-styrene copolymer 326-91-0DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 480-16-0DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 536-17-4DP, reaction products				
with diazotized aminated divinylnbenzene-styrene copolymer 1149-16-2DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 1170-02-1DP, reaction products with diazotized aminated divinylnbenzene-styrene copolymer 3012-52-0DP, reaction products				
with diazotized aminated divinylnbenzene-styrene copolymer 9003-70-7DP, aminated, diazotized, derivs.				
RL: FPEP (Preparation)				
(ion exchangers, manufacture of)				
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD				
(2 CITINGS)				

L15 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN
 TI Preparation of purified chelating cellulose exchange filters
 GI



AB Treating 5 g HCHO-crosslinked cellulose with 10.6 g Na 2-[(3-amino-4-hydroxyphenyl)sulfonyl]ethyl sulfate(I) in the presence of 2.5 g NaOH for 31 h at 75° gave an ester with N content .apprx.0.55 mmol/g. Diazotization of this product and coupling with β-naphthol, 2,2'-ethylenediamine-N,N'-bis[α-hydroxybenzeneacetic acid](II) or 1-(2-thenoyl)-3,3,3-trifluoroacetone gave cation exchangers with exchange capacity 0.2-0.55 mmol/g. After use, the cation exchangers were purified with H2O, Me2CO, and pyridine to give regenerated products containing 0.000002-0.0084% metal residues.

ACCESSION NUMBER: 1980:182726 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 92:182726

ORIGINAL REFERENCE NO.: 92:29617a,29620a

TITLE: Preparation of purified chelating cellulose exchange

filters

AUTHOR(S): Roeber, H. M.; Burba, P.; Lieser, K. H.
CORPORATE SOURCE: Fachber. Anorg. Chem. Kernchem., Tech. Hochsch. Darmstadt, Darmstadt, 6100, Fed. Rep. Ger.

SOURCE: Angewandte Makromolekulare Chemie (1980), 85, 137-48

CODEN: ANMCBO; ISSN: 0003-3146

DOCUMENT TYPE: Journal

LANGUAGE: German

CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)

IT Cation exchangers

(cellulose-based, manufacture of)

IT 135-19-3DP, coupling products with diazotized cellulose aminophenol derivs. 326-91-0DP, coupling products with diazotized cellulose aminophenol derivs. 1170-02-1DP, coupling products with diazotized cellulose aminophenol derivs.

RL: PREP (Preparation)

(cation exchangers, purification of)

IT 73561-56-5DP, diazotizaion and coupling products

RL: PREP (Preparation)

(preparation of, for cation exchangers)